

The COPUS Clarion

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The Coalition on the Public Understanding of Science (COPUS) is a grassroots effort linking universities, scientific societies, science centers and museums, advocacy groups, media, educators, government agencies, businesses, and industry in a peer network having as its goal a greater public understanding of the nature of science and its value to society.

30 DAYS, 350 COLLABORATING ORGANIZATIONS, 500 FREE EVENTS, 200,000 PARTICIPANTS *The Inaugural San Diego Science Festival -- Just the beginning!*

By Larry Bock, biobock@mac.com

So, what did I learn from spearheading this event? And why am I taking on an even larger initiative, the creation of the first National Science Festival in Washington, D.C.?



The Inaugural San Diego Science Festival was modeled after popular science festivals in Europe and Australia. These festivals last seven to fourteen days, draw between 100,000 and 1,000,000 people to celebrate science through inspiring lectures, hands-on activities and exhibits, contests, theatre, comedy, poetry, art, film and music – all celebrating science.

Yes, the goal was to celebrate science with a science party because - to quote inventor, entrepreneur and FIRST Robotics founder Dean Kamen - "Society gets what it celebrates." If scientists are perceived as boring, and science careers as dull, Nobel Laureates won't compete with rock stars in the minds of our nation's youth. But what if scientists were perceived as cool and sexy, and science careers as a way to improve the world? So, the Festival was designed to be a fun community opportunity to discover, explore, discuss, be amazed and be inspired.

To be successful, a Festival cannot be a temporary bulge in year-round educational programming competing with outreach efforts of its participating organizations. We worked hard to engage the San Diego community in the Festival as a grassroots collaboration where all participants were acknowledged equally, from UCSD to Girl Scouts.

Our month-long Festival rolled out in a progression:

- First, we brought scientists to schools. Leading scientists spoke at school assemblies describing the field that they



are passionate about, the rewards and challenges of their own career path, and opportunities for young people in the sciences (dubbed the "Nifty Fifty" and "Lunch with a Laureate").

- Second, we brought students to major science venues throughout the county for hands-on interactive experiments in state-of-the-art research environments (dubbed the "Science on the Mesa").
- Third, we brought the public to a series of informal science events with a fun and catchy hook (dubbed, collectively, "Festival Events" with offerings like the Science of Wine, Chemistry of Love, Science of Chocolate, Politics of Science and 75 others).

Finally, we brought everyone together for a major Science Expo., where 250 organizations presented hands-on interactive activities, exhibits, and stage shows geared to the general public.

Here's a tough grading of these events with a candid discussion of lessons learned and how we will do it differently at our National Science Festival -- the USA Science Festival.

"Lunch with a Laureate" Grade: A- 2,000 participants

Eight of Southern California's Nobel Laureates hosted brown bag lunches with groups of 100 students, with an informal Q&A, about their perspectives on the future of science, and the Laureate's own journey.

The Laureates were terrific, bringing science to the kids' level, personally greeting each student, and remaining afterward to sign autographs. The students and their teachers were asked to prepare questions in advance. We asked the Laureates to confine opening remarks to five minutes and start the discussion with a current hot issue in their field. This program humanized these figures whose careers seem so remote and unattainable.

“Nifty Fifty” Grade: B- 40,000 participants

One hundred of San Diego’s leading scientists presented school assemblies at middle and high schools. Many were truly magical, but some fell flat. Commanding the attention of a large high school audience proved to be significantly more challenging than speaking to professional peers. Better: multiple presentations to smaller groups. The best talks incorporated multi-media, provocative ideas, hands-on demos, audience participation and -- YES -- gave out small prizes. Those that fell flat were not modified for this age group. The best speakers focused on the impact of science on the students’ lives versus the details of the science itself. Recommended: explicit instructions to speakers and advance interaction between speakers and teachers to set expectations. The best assemblies occurred when teachers were equally engaged in the outcome and students were given an assignment to demonstrate active participation.



Expo Grade: A+ 75,000 participants

Our finale was a science blowout in Balboa Park, where 250 organizations offered dynamic exhibits, demonstrations and stage shows from LOTS of receptive smiling faces. No static poster sessions. We hoped for ten thousand participants but had over seventy five thousand. A major reason for success: convincing schools to give extra credit to students who came.

Exhibitors loved the event. Sample thank-you note: “Thank you for showing that, as a scientist, I am cool.” or “That was an exhausting day but I’d do it again in a flash.”

Biggest problem: parking. Also, insufficient volunteer training. Evidence of success: most financial sponsors put a line item in their 2010 budget for the next Festival.

The Inaugural San Diego Science Festival demonstrated that people of all ages respond positively to science when it is presented in a fun, exciting, accessible way. Seeing the thousands of smiling faces at the Expo inspires me to do it all again. See for yourself at: <http://www.scivee.tv/node/12528>

That’s why I’ve decided to take the Festival to the next level and create a National Festival in Washington, D.C. in fall 2010. Please consider being part of the Woodstock of Science on the National Mall in the fall of 2010.

“Science on the Mesa” Grade: A 3,000 participants

Forty companies opened their doors one evening for groups of fifty to two hundred students. The companies created marvelous programs with novel experiments, interactions with their young scientists and senior management, theatrical performances, vanity pictures in lab coats and surgery gowns, fun prizes and more. The toughest problem was ensuring student attendance. We were disappointed by last minute cancellations, although attendance commitments were stressed and we gave bus grants. We should have, in airline fashion, overbooked and insisted on formal buy-in of school principals to ensure delivery of registered students.

Festival Events Grade: B+ 15,000 participants

Example: the Science of Wine - the participants gathered at a biotech company involved in research on the science of taste. Participants heard about the latest research on the anti-aging properties of red wine while tasting wines.

Timing and venue selection were critical in accommodating audiences of unpredictable sizes.



For information on participating in the **INAUGURAL USA SCIENCE FESTIVAL**, please contact Larry Bock. www.usasciencefestival.org biobock@mac.com (760) 846-3473

All images were provided by Larry Bock.

DON’T MISS THE YoS 2009 HIGHLIGHTS CELEBRATING OCTOBER’S THEME OF THE GEOSCIENCES AND PLANET EARTH



Questions? Comments? Ideas? Contact admin@copusproject.org.

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